

\$ STN;Highlight=***;HighlightOff=*** ;

Welcome to STN International! Enter x:x

LOGINID:sssptal65lpxp

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * Welcome to STN International * * * * *

NEWS 1 Web Page URLs for STN Seminar Schedule - N. America
NEWS 2 Jan 25 BLAST(R) searching in REGISTRY available in STN on the Web
NEWS 3 Jan 29 FSTA has been reloaded and moves to weekly updates
NEWS 4 Feb 01 DKILIT now produced by FIZ Karlsruhe and has a new update
frequency
NEWS 5 Feb 19 Access via Tymnet and SprintNet Eliminated Effective 3/31/02
NEWS 6 Mar 08 Gene Names now available in BIOSIS
NEWS 7 Mar 22 TOXLIT no longer available
NEWS 8 Mar 22 TRCTHERMO no longer available
NEWS 9 Mar 28 US Provisional Priorities searched with P in CA/CAPLUS
and USPATFULL
NEWS 10 Mar 28 LIPINSKI/CALC added for property searching in REGISTRY
NEWS 11 Apr 02 PAPERCHEM no longer available on STN. Use PAPERCHEM2 instead.
NEWS 12 Apr 08 "Ask CAS" for self-help around the clock
NEWS 13 Apr 09 BEILSTEIN: Reload and Implementation of a New Subject Area
NEWS 14 Apr 09 ZDB will be removed from STN
NEWS 15 Apr 19 US Patent Applications available in IFICDB, IFIPAT, and IFIUDB
NEWS 16 Apr 22 Records from IP.com available in CAPLUS, HCAPLUS, and ZCAPLUS
NEWS 17 Apr 22 BIOSIS Gene Names now available in TOXCENTER
NEWS 18 Apr 22 Federal Research in Progress (FEDRIP) now available

NEWS EXPRESS February 1 CURRENT WINDOWS VERSION IS V6.0d,
CURRENT MACINTOSH VERSION IS V6.0a(ENG) AND V6.0Ja(JP),
AND CURRENT DISCOVER FILE IS DATED 05 FEBRUARY 2002
NEWS HOURS STN Operating Hours Plus Help Desk Availability
NEWS INTER General Internet Information
NEWS LOGIN Welcome Banner and News Items
NEWS PHONE Direct Dial and Telecommunication Network Access to STN
NEWS WWW CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that
specific topic.

All use of STN is subject to the provisions of the STN Customer
agreement. Please note that this agreement limits use to scientific
research. Use for software development or design or implementation
of commercial gateways or other similar uses is prohibited and may
result in loss of user privileges and other penalties.

* * * * * STN Columbus * * * * *

FILE 'REGISTRY' ENTERED AT 15:06:34 ON 23 MAY 2002

> help reference

FILE 'REGISTRY' ACCESS NOT AUTHORIZED
COST IN U.S. DOLLARS

	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

INDEX 'ADISALERTS, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, AQUASCI,
BIOBUSINESS, BIOCOMMERCE, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA,
CANCERLIT, CAPLUS, CEABA-VTB, CEN, CIN, CONFSCI, CROPB, CROPU, DDFB,
DDFU, DGENE, DRUGB, DRUGLAUNCH, DRUGMONOG2, ...'

ENTERED AT 15:06:34 ON 23 MAY 2002

61 FILES IN THE FILE LIST IN STNINDEX

Enter SET DETAIL ON to see search term postings or to view
search error messages that display as 0* with SET DETAIL OFF.

-> fil reg

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.53	0.74

FILE 'REGISTRY' ENTERED AT 15:06:46 ON 23 MAY 2002
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2002 American Chemical Society (ACS)

STRUCTURE FILE UPDATES: 21 MAY 2002 HIGHEST RN 420086-04-0
DICTIONARY FILE UPDATES: 21 MAY 2002 HIGHEST RN 420086 04-0

TSCA INFORMATION NOW CURRENT THROUGH July 7, 2001

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Calculated physical property data is now available. See HELP PROPERTIES
for more information. See STNote 27, Searching Properties in the CAS
Registry File, for complete details:
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=> e bone morphogenic protein/cn

E1	1	BONE MORPHOGENETIC PROTEIN-4 (MOUSE)/CN
E2	1	BONE MORPHOGENETIC PROTEIN-7 (DANIO RERIO)/CN
E3	0 -->	BONE MORPHOGENETIC PROTEIN/CN
E4	1	BONE MORPHOGENETIC PROTEIN (DUGESIA JAPONICA C-TERMINAL FRAGMENT)/CN
E5	1	BONE MORPHOGENETIC PROTEIN 2 (HUMAN CLONE PREKR TAL) FUSION PROTEIN WITH BONE MORPHOGENETIC PROTEIN 12 (HUMAN) (PRECURSOR)/CN
E6	1	BONE MORPHOGENETIC PROTEIN 2, PREPRO (GALLUS GALLUS CLONE P5

```

E7          1      GENE BMP-4 (C-TERMINAL FRAGMENT)/CN
              BONE MORPHOGENIC PROTEIN 4 (GALLUS GALLUS CLONE P6 GENE BMP-
              4 PREPRO)/CN
E8          1      BONE MORPHOGENIC PROTEIN RECEPTOR KINASE/CN
E9          1      BONE MORPHOGENIC PROTEIN TYPE II RECEPTOR (HUMAN CLONE U2 PR
              ECURSOR)/CN
E10         1      BONE MORPHOGENIC PROTEIN 2 (HUMAN RECOMBINANT RHBMP-2)/CN
E11         1      BONE OIL/CN
E12         1      BONE OIL, DIETHANOLAMIDE/CN

```

=> e bmp/cn

```

E1          1      BMNO/CN
E2          1      BMOO/CN
E3          2 --> BMP/CN
E4          1      BMP (CORROSION INHIBITOR)/CN
E5          1      BMP (PEPTIDE)/CN
E6          1      BMP 1/CN
E7          1      BMP 10 (MOUSE GENE BMP10 PRECURSOR)/CN
E8          1      BMP 10 (MOUSE GENE BMP10)/CN
E9          1      BMP 2/CN
E10         1      BMP 3/CN
E11         1      BMP 4/CN
E12         1      BMP RECEPTOR IB (DANIO RERIO STRAIN AB)/CN

```

=> index bioscience

FILE 'DRUGMONOG' ACCESS NOT AUTHORIZED

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.38

1.12

INDEX 'ADISALERTS, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, AQUASCI,
 BIOBUSINESS, BIOCOMMERCE, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA,
 CANCERLIT, CAPLUS, CEABA-VTB, CEN, CIN, CONFSCI, CROPB, CROPU, DDFB,
 DDFU, DGENE, DRUGB, DRUGLAUNCH, DRUGMONOG2, ...'

ENTERED AT 15:07:33 ON 23 MAY 2002

61 FILES IN THE FILE LIST IN STNINDEX

Enter SET DETAIL ON to see search term postings or to view
 search error messages that display as 0* with SET DETAIL OFF.

=> s bmp? or bone morphogen? protein?

```

15  FILE ADISALERTS
13  FILE ADISINSIGHT
6   FILE ADISNEWS
216 FILE AGRICOLA
8   FILE ANABSTR
329 FILE AQUASCI
321 FILE BIOBUSINESS
98  FILE BIOCOMMERCE
4689 FILE BIOSIS
197 FILE BIOTECHABS
197 FILE BIOTECHDS
2147 FILE BIOTECHNO

```

470 FILE CABA
 1609 FILE CANCERLIT
 14 FILES SEARCHED...
 4935 FILE CAPLUS
 63 FILE CEABA-VTB
 8 FILE CEN
 88 FILE CIN
 225 FILE CONFSCI
 38 FILE CROPU
 1 FILE DDFB
 160 FILE DDFU
 2929 FILE DGENE
 24 FILES SEARCHED...
 1 FILE DRUGB
 1 FILE DRUGMONOG2
 52 FILE DRUGNL
 192 FILE DRUGU
 15 FILE DRUGUPDATES
 80 FILE EMBAL
 3809 FILE EMBASE
 2165 FILE ESBIOBASE
 550 FILE FEDRIP
 18 FILE FOMAD
 18 FILE FROSTI
 13 FILE FSTA
 1872 FILE GENBANK
 17 FILE HEALSAFE
 40 FILES SEARCHED...
 467 FILE IFIPAT
 872 FILE JICST-EPLUS
 1471 FILE LIFESCI
 7 FILE MEDICONF
 4196 FILE MEDLINE
 7 FILE NIOSHTIC
 295 FILE NTIS
 20 FILE OCEAN
 1422 FILE PASCAL
 15 FILE PHAR
 1 FILE PHIC
 163 FILE PHIN
 4126 FILE PROMT
 54 FILES SEARCHED...
 5343 FILE SCISEARCH
 974 FILE TOXCENTER
 2757 FILE USPATFULL
 17 FILE USPAT2
 596 FILE WFIDS
 596 FILE WFINDEX

56 FILES HAVE ONE OR MORE ANSWERS, 61 FILES SEARCHED IN STNINDEX

L1 QUE BMP? OR BONE MORPHOGEN? PROTEIN?

=> s 11 (s) (calcium pyrophosphate? or calcium hydrogen phosphate or calcium monophosphate or acidic calcium phosphat?)

UNMATCHED LEFT PARENTHESIS 'S' (CALCIUM'

The number of right parentheses in a query must be equal to the number of left parentheses.

=> s l1 (s) (calcium pyrophosphate? or calcium hydrogen phosphate or calcium monophosphate or acidic calcium phosphat?)

12 FILES SEARCHED...
23 FILES SEARCHED...
32 FILES SEARCHED...
0* FILE FEDRIP
42 FILES SEARCHED...
50 FILES SEARCHED...
6 FILE USPATFULL
1 FILE WPIDS
60 FILES SEARCHED...
1 FILE WPINDEX

3 FILES HAVE ONE OR MORE ANSWERS, 61 FILES SEARCHED IN STNINDEX

L2 QUE L1 (S) (CALCIUM PYROPHOSPHATE? OR CALCIUM HYDROGEN PHOSPHATE OR CALCIUM MONOPHOSPHATE OR ACIDIC CALCIUM PHOSPHAT?)

=> s l1 (s) (brushite or monetite)

14 FILES SEARCHED...
32 FILES SEARCHED...
0* FILE FEDRIP
46 FILES SEARCHED...
2 FILE USPATFULL

1 FILES HAVE ONE OR MORE ANSWERS, 61 FILES SEARCHED IN STNINDEX

L3 QUE L1 (S) (BRUSHITE OR MONETITE)

=> s l1 and (calcium pyrophosphate? or calcium hydrogen phosphate or calcium monophosphate or acidic calcium phosphat?)

12 FILES SEARCHED...
5 FILE CAPLUS
24 FILES SEARCHED...
38 FILES SEARCHED...
1 FILE IFIPAT
50 FILES SEARCHED...
51 FILE USPATFULL
1 FILE USPAT2
1 FILE WPIDS
1 FILE WPINDEX

6 FILES HAVE ONE OR MORE ANSWERS, 61 FILES SEARCHED IN STNINDEX

L4 QUE L1 AND (CALCIUM PYROPHOSPHATE? OR CALCIUM HYDROGEN PHOSPHATE OR CALCIUM MONOPHOSPHATE OR ACIDIC CALCIUM PHOSPHAT?)

=> d rank

F1 51 USPATFULL
F2 5 CAPLUS

F3	1	IFIPAT
F4	1	USPAT2
F5	1	WPIDS
F6	1	WPINDEX

=> fil f2

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	20.14	21.26

FILE 'CAPLUS' ENTERED AT 15:30:21 ON 23 MAY 2002
 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
 PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
 COPYRIGHT (C) 2002 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 23 May 2002 VOL 136 ISS 21
 FILE LAST UPDATED: 22 May 2002 (20020522/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

=> s 14

```

3803 BMP?
131550 BONE
20783 MORPHOGEN?
1652967 PROTEIN?
3770 BONE MORPHOGEN? PROTEIN?
      (BONE(W)MORPHOGEN?(W)PROTEIN?)
566259 CALCIUM
30455 PYROPHOSPHATE?
795 CALCIUM PYROPHOSPHATE?
      (CALCIUM(W)PYROPHOSPHATE?)
566259 CALCIUM
677511 HYDROGEN
449948 PHOSPHATE
1109 CALCIUM HYDROGEN PHOSPHATE
      (CALCIUM(W)HYDROGEN(W)PHOSPHATE)
566259 CALCIUM

```

26543 MONOPHOSPHATE
28 CALCIUM MONOPHOSPHATE
(CALCIUM(W) MONOPHOSPHATE)

179265 ACIDIC

566259 CALCIUM

654239 PHOSPHAT?

31 ACIDIC CALCIUM PHOSPHAT?

(ACIDIC(W) CALCIUM(W) PHOSPHAT?)

L5 5 L1 AND (CALCIUM PYROPHOSPHATE? OR CALCIUM HYDROGEN PHOSPHATE OR
CALCIUM MONOPHOSPHATE OR ACIDIC CALCIUM PHOSPHAT?)

=> d 15 1- all

YOU HAVE REQUESTED DATA FROM 5 ANSWERS - CONTINUE? Y/(N):n

=> s 15 and (collagen or fibrin or alginate)

66134 COLLAGEN

15781 FIBRIN

16641 ALGINATE

L6 1 L5 AND (COLLAGEN OR FIBRIN OR ALGINATE)

=> d 16 1 all

L6 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2002 ACS

AN 2001:371365 CAPLUS

DN 134:357624

TI Bone prosthetic materials comprising calcium phosphate and bone formation
inducers

IN Irie, Hiroyuki

PA Olympus Optical Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 4 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM A61L027-00

ICS A61L027-00

CC 63-7 (Pharmaceuticals)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2001137328	A2	20010522	JP 1999-321294	19991111
AB	This invention relates to bone fillers comprising (1) multiporous .beta.-tricalcium phosphate with porosity of 60-80 % and pore diam. 50-1000 .mu.m and (2) bone-formation promoters selected from the group consisting of atelocollagens, hyaluronic acid, ***fibrin*** pastes, gelatins, and growth factors. A freeze-dried powder contained porous .beta.-tricalcium phosphate and recombinant ***bone*** ***morphogenetic*** ***protein*** .				
ST	bone filler calcium phosphate growth factor				
IT	Collagens, biological studies				
	EL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (atelocollagens; bone fillers contg. Ca phosphate and bone formation inducers)				
IT	***Bone***	***morphogenetic***		***proteins***	

Fibrins
 Gelatins, biological studies
 Platelet-derived growth factors
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (bone fillers contg. Ca phosphate and bone formation inducers)
 IT Prosthetic materials and Prosthetics
 (bone fillers; bone fillers contg. Ca phosphate and bone formation
 inducers)
 IT Bone, disease
 (defect; bone fillers contg. Ca phosphate and bone formation inducers)
 IT Transforming growth factors
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (.beta.-; bone fillers contg. Ca phosphate and bone formation inducers)
 IT 7758-87-4P, .beta.-Tricalcium phosphate
 RL: IMF (Industrial manufacture); THU (Therapeutic use); BIOL (Biological
 study); PREP (Preparation); USES (Uses)
 (bone fillers contg. Ca phosphate and bone formation inducers)
 IT 9004-61-9, Hyaluronic acid 61912-98-9, IGF 62031-54-3, FGF
 106096-93-9, Basic FGF
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (bone fillers contg. Ca phosphate and bone formation inducers)
 IT 471-34-1, Calcium carbonate, reactions 7757-93-9, ***Calcium***
 hydrogen ***phosphate***
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (prepn. of porous tricalcium phosphate for bone fillers)

=>

---Logging off of STN---

=>

Executing the logoff script...

=> LOG Y

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	31.43	52.69
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-0.62	-0.62

STN INTERNATIONAL LOGOFF AT 15:31:57 ON 23 MAY 2002

Welcome to STN International! Enter x:x

LOGINID:sssptal65lpxp

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * Welcome to STN International * * * * *

NEWS 1 Web Page URLs for STN Seminar Schedule - N. America
NEWS 2 Jan 25 BLAST(R) searching in REGISTRY available in STN on the Web
NEWS 3 Jan 29 FSTA has been reloaded and moves to weekly updates
NEWS 4 Feb 01 DKILIT now produced by FIZ Karlsruhe and has a new update frequency
NEWS 5 Feb 19 Access via Tymnet and SprintNet Eliminated Effective 3/31/02
NEWS 6 Mar 08 Gene Names now available in BIOSIS
NEWS 7 Mar 22 TOXLIT no longer available
NEWS 8 Mar 22 TRCTHERMO no longer available
NEWS 9 Mar 28 US Provisional Priorities searched with P in CA/CAPLUS and USPATFULL
NEWS 10 Mar 28 LIPINSKI/CALC added for property searching in REGISTRY
NEWS 11 Apr 02 PAPERCHEM no longer available on STN. Use PAPERCHEM2 instead.
NEWS 12 Apr 08 "Ask CAS" for self-help around the clock
NEWS 13 Apr 09 BEILSTEIN: Reload and Implementation of a New Subject Area
NEWS 14 Apr 09 ZDB will be removed from STN
NEWS 15 Apr 19 US Patent Applications available in IFICDB, IFIPAT, and IFIUDB
NEWS 16 Apr 22 Records from IP.com available in CAPLUS, HCAPLUS, and ZCAPLUS
NEWS 17 Apr 22 BIOSIS Gene Names now available in TOXCENTER
NEWS 18 Apr 22 Federal Research in Progress (FEDRIP) now available

NEWS EXPRESS February 1 CURRENT WINDOWS VERSION IS V6.0d,
CURRENT MACINTOSH VERSION IS V6.0a(ENG) AND V6.0Ja(JP),
AND CURRENT DISCOVER FILE IS DATED 05 FEBRUARY 2002
NEWS HOURS STN Operating Hours Plus Help Desk Availability
NEWS INTER General Internet Information
NEWS LOGIN Welcome Banner and News Items
NEWS PHONE Direct Dial and Telecommunication Network Access to STN
NEWS WWW CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 10:47:06 ON 24 MAY 2002

=> index bioscience

FILE 'DRUGMONOG' ACCESS NOT AUTHORIZED

COST IN U.S. DOLLARS

FULL ESTIMATED COST

SINCE FILE	TOTAL
ENTRY	SESSION
0.21	0.21

INDEX 'ADISALERTS, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, AQUASCI,
BIOBUSINESS, BIOCOMMERCE, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA,
CANCERLIT, CAPLUS, CEABA-VTB, CEN, CIN, CONFSCI, CROPB, CROPU, DDFB,
DDFU, DGENE, DRUGB, DRUGLAUNCH, DRUGMONOG2, ...'

ENTERED AT 10:47:16 ON 24 MAY 2002

61 FILES IN THE FILE LIST IN STNINDEX

Enter SET DETAIL ON to see search term postings or to view
search error messages that display as 0* with SET DETAIL OFF.

=> s dicalcium phosphate or monocalcium phosphate or calcium monophosphate or
calcium pyrophosphate or calcium hydrogen phosphate or brushite or monetite

19	FILE ADISALERTS
1	FILE ADISINSIGHT
4	FILE ADISNEWS
274	FILE AGRICOLA
22	FILE ANABSTR
23	FILE AQUASCI
272	FILE BIOBUSINESS
1992	FILE BIOSIS
15	FILE BIOTECHABS
15	FILE BIOTECHDS
113	FILE BIOTECHNO
1476	FILE CABA
95	FILE CANCERLIT
5474	FILE CAPLUS
38	FILE CEABA-VTB
5	FILE CEN
179	FILE CIN
40	FILE CONFSCI
3	FILE CROPB
20	FILE CROPU
78	FILE DDFB
657	FILE DDFU
23 FILES SEARCHED...	
18	FILE DGENE
78	FILE DRUGB
29	FILE DRUGLAUNCH
4	FILE DRUGMONOG2
726	FILE DRUGU
1	FILE DRUGUPDATES
11	FILE EMBAL
1508	FILE EMBASE
183	FILE ESBIOBASE
27	FILE FEDRIP
2	FILE FOMAD
1480	FILE FOREGE
74	FILE FROSTI
93	FILE FSTA
1	FILE GENBANK
4	FILE HEALSAFE
925	FILE IFIPAT
190	FILE JICST-EPLUS
5	FILE KOSMET

114 FILE LIFESCI
 45 FILES SEARCHED...
 1622 FILE MEDLINE
 9 FILE NIOSHTIC
 65 FILE NTIS
 728 FILE PASCAL
 17 FILE PHIN
 308 FILE PROMT
 1648 FILE SCISEARCH
 698 FILE TOXCENTER
 12037 FILE USPATFULL
 49 FILE USPAT2
 1213 FILE WPIDS
 60 FILES SEARCHED...
 1213 FILE WPINDEX

54 FILES HAVE ONE OR MORE ANSWERS, 61 FILES SEARCHED IN STNINDEX

L1 QUE DICALCIUM PHOSPHATE OR MONOCALCIUM PHOSPHATE OR CALCIUM MONOPHOSPHATE
 OR CALCIUM PYROPHOSPHATE OR CALCIUM HYDROGEN PHOSPHATE OR BRUSHITE OR
 MONETITE

=> s l1 (s) (bmp? or bone morph? protein?)

1 FILE BIOSIS
 11 FILES SEARCHED...
 2 FILE CAPLUS
 16 FILES SEARCHED...
 27 FILES SEARCHED...
 1 FILE EMBASE
 0* FILE FEDRIP
 36 FILES SEARCHED...
 1 FILE JICST-EPLUS
 1 FILE LIFESCI
 2 FILE MEDLINE
 46 FILES SEARCHED...
 1 FILE PASCAL
 2 FILE SCISEARCH
 55 FILES SEARCHED...
 4 FILE USPATFULL
 1 FILE WPIDS
 1 FILE WPINDEX

11 FILES HAVE ONE OR MORE ANSWERS, 61 FILES SEARCHED IN STNINDEX

L2 QUE L1 (S) (BMP? OR BONE MORPH? PROTEIN?)

=> d rank

F1	4	USPATFULL
F2	2	CAPLUS
F3	2	MEDLINE
F4	2	SCISEARCH
F5	1	BIOSIS
F6	1	EMBASE
F7	1	JICST-EPLUS
F8	1	LIFESCI

F9 1 PASCAL
F10 1 WPIDS
F11 1 WPINDEX

=> fil f2-ff9

'F2-FF9' EXCEEDS F# RANGE 'F1-F61'

SESSION CONTINUES IN INDEX FILES 'ADISALERTS, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, AQUASCI, BIOBUSINESS, BIOCOMMERCE, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA, CANCERLIT, CAPLUS, CEABA-VTB, CEN, CIN, CONFSCI, CROPB, CROPU, DDFB, DDFU, DGENE, DRUGB, DRUGLAUNCH, DRUGMONOG2, DRUGNL, DRUGU, DRUGUPDATES, EMBAL, EMBASE, ESBIODASE, FEDRIP, FOMAD, FOREGE, FROSTI, FSTA, GENBANK, HEALSAFE, IFIPAT, JICST-EPLUS, KOSMET, LIFESCI, MEDICONF, MEDLINE, NIOSHTIC, NTIS, OCEAN, PASCAL, PHAR, PHIC, PHIN, PROMT, SCISEARCH, SYNTHLINE, TOXCENTER, USPATFULL, USPAT2, WPIDS, WPINDEX'

=> fil f2-f9

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	4.77	4.98

FILE 'CAPLUS' ENTERED AT 10:52:34 ON 24 MAY 2002
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2002 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'MEDLINE' ENTERED AT 10:52:34 ON 24 MAY 2002

FILE 'SCISEARCH' ENTERED AT 10:52:34 ON 24 MAY 2002
COPYRIGHT (C) 2002 Institute for Scientific Information (ISI) (R)

FILE 'BIOSIS' ENTERED AT 10:52:34 ON 24 MAY 2002
COPYRIGHT (C) 2002 BIOLOGICAL ABSTRACTS INC.(R)

FILE 'EMBASE' ENTERED AT 10:52:34 ON 24 MAY 2002
COPYRIGHT (C) 2002 Elsevier Science B.V. All rights reserved.

FILE 'JICST-EPLUS' ENTERED AT 10:52:34 ON 24 MAY 2002
COPYRIGHT (C) 2002 Japan Science and Technology Corporation (JST)

FILE 'LIFESCI' ENTERED AT 10:52:34 ON 24 MAY 2002
COPYRIGHT (C) 2002 Cambridge Scientific Abstracts (CSA)

FILE 'PASCAL' ENTERED AT 10:52:34 ON 24 MAY 2002
Any reproduction or dissemination in part or in full,
by means of any process and on any support whatsoever
is prohibited without the prior written agreement of INIST-CNRS.
COPYRIGHT (C) 2002 INIST-CNRS. All rights reserved.

=> s 12

5 FILES SEARCHED...
L3 11 L2

=> dup rem 13

PROCESSING COMPLETED FOR L3

L4 4 DUP REM L3 (7 DUPLICATES REMOVED)

=> d 14 1- all

YOU HAVE REQUESTED DATA FROM 4 ANSWERS - CONTINUE? Y/(N):y

L4 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 1
AN 1998:801006 CAPLUS
DN 130:144146
TI Healing of segmental bone defects in rats induced by a .beta.-TCP-MCPM cement combined with rhBMP-2
AU Ohura, Kouichiro; Hamanishi, Chiaki; Tanaka, Seisuke; Matsuda, Nobuyuki
CS Department of Orthopaedic Surgery, Kinki University School of Medicine, Osaka, 589-8511, Japan
SO Journal of Biomedical Materials Research (1999), 44(2), 168-175
CODEN: JBMRBG; ISSN: 0021-9304
PB John Wiley & Sons, Inc.
DT Journal
LA English
CC 63-7 (Pharmaceuticals)
AB A .beta.-tricalcium phosphate- ***monocalcium*** ***phosphate*** monohydrate (.beta.-TCP-MCPM) cement was evaluated as an effective carrier of recombinant human ***bone*** ***morphogenetic*** ***protein*** 2 (rhBMP 2) in rat femoral crit.-size defects. Hard cement cylinders (4 x 5 mm) impregnated with two different doses of rhBMP-2 (1.26 or 6.28 .mu.g) were implanted into each defect, and the results were compared with those in rats that had implantations of cylinders only. Implantation of the 6.28 .mu.g dose of rhBMP-2 caused a large bone shell to form around the defect, resulting in osseous union in all cases within 3 wk. Except for .beta.-TCP granules, the cement was resorbed and replaced by bone tissue at 6 wk. A torsion test at 9 wk showed that the failure torque and bone stiffness had recovered 99% and 141%, resp., compared with the intact contralateral femur. The defects that received 1.26 .mu.g of rhBMP-2 resulted in 40% union and 41% of the failure torque at 9 wk. However, no instances of union were obsd. in the defects implanted with cylinders only. In conclusion, the .beta.-TCP-MCPM cement was shown to be effective as a rhBMP-2 carrier. Combined with rhBMP-2, this cement was rapidly resorbed and completely healed the defects.
ST bone defect calcium phosphate cement; BMP calcium phosphate composite bone defect
IT Bone morphogenetic proteins
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(2; healing of segmental bone defects in rats induced by a .beta.-TCP-MCPM cement combined with rhBMP-2)
IT Medical goods
(bone cements; healing of segmental bone defects in rats induced by a .beta.-TCP-MCPM cement combined with rhBMP-2)
IT Prosthetic materials and Prosthetics
(composites, implants; healing of segmental bone defects in rats induced by a .beta. TCP MCPM cement combined with rhBMP-2)

IT Bone, disease
 (defect; healing of segmental bone defects in rats induced by a .beta.-TCP-MCPM cement combined with rhBMP-2)
 IT 7758-87-4, Tricalcium phosphate 10031-30-8, Monocalcium phosphate monohydrate
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (healing of segmental bone defects in rats induced by a .beta.-TCP-MCPM cement combined with rhBMP-2)

RE.CNT 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Aldinger, G; Int Orthop 1991, V15, P169 MEDLINE
- (2) Chow, L; Centen Mem Issue Ceram Soc Jpn 1991, V99, P954 CAPLUS
- (3) Cole, B; J Bone Min Metab 1993, V8, PS244
- (4) Constantino, P; Plast Reconstr Surg 1992, V90, P174
- (5) Gao, T; J Biomed Mater Res 1996, V32, P505 CAPLUS
- (6) Gerhart, T; Clin Orthop 1993, V293, P317
- (7) Heckman, J; J Bone Joint Surg 1991, V73A, P750
- (8) Kamegai, A; Biomed Mater Eng 1994, V4, P291 CAPLUS
- (9) Kenley, R; J Biomed Mater Res 1994, V28, P1139 CAPLUS
- (10) Lee, S; J Biomed Mater Res 1994, V28, P1149 CAPLUS
- (11) Matsuda, N; Phosphorus Res Bull 1996, V6, P185 CAPLUS
- (12) Miyamoto, S; Ann Chir Gynaecol 1993, V82, P69
- (13) Miyamoto, S; Clin Orthop 1993, V294, P333
- (14) Monma, H; Tougyou Kyoukaishi 1983, V91, P473 CAPLUS
- (15) Ohura, K; J Biomed Mater Res 1996, V30, P193 CAPLUS
- (16) Sato, K; Clin Orthop 1984, V187, P180
- (17) Terashima, Y; Proc Soc Exp Biol Med 1974, V146, P855 CAPLUS
- (18) Urist, M; Clin Orthop 1984, V187, P277 CAPLUS
- (19) Urist, M; Clin Orthop 1987, V214, P295 CAPLUS
- (20) Volek-Smith, H; Proc Soc Exp Biol Med 1996, V211, P265 CAPLUS
- (21) Wozney, J; Science 1988, V242, P1528 CAPLUS
- (22) Yasko, A; J Bone Joint Surg 1992, V74A, P659
- (23) Zheng, M; J Cell physiol 1994, V159, P76 CAPLUS

L4 ANSWER 2 OF 4 MEDLINE DUPLICATE 2
 AN 1999069840 MEDLINE
 DN 99069840 PubMed ID: 9852738
 TI Osteotransductive bone cements.
 AU Eriessens F C; Planell J A; Boltong M G; Khairoun I; Ginebra M P
 CS Department of Materials Science and Metallurgy, Universitat Politecnica de Catalunya, Barcelona, Spain.
 SO PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS. PART H, JOURNAL OF ENGINEERING IN MEDICINE, (1998) 212 (6) 427-35.
 Journal code: ABJ; 8908934. ISSN: 0954-4119.
 CY ENGLAND: United Kingdom
 ET Journal; Article; (JOURNAL ARTICLE)
 LA English
 FS Priority Journals
 EM 199901
 ED Entered STN: 19990115
 Last Updated on STN: 19990115
 Entered Medline: 19990104
 AB Calcium phosphate bone cements (CPBCs) are osteotransductive, i.e. after implantation in bone they are transformed into new bone tissue. Furthermore, due to the fact that they are mouldable, their

osteointegration is immediate. Their chemistry has been established previously. Some CPBCs contain amorphous calcium phosphate (ACP) and set by a sol-gel transition. The others are crystalline and can give as the reaction product ***dicalcium*** ***phosphate*** dihydrate (DCPD), calcium-deficient hydroxyapatite (CDHA), carbonated apatite (CA) or hydroxyapatite (HA). Mixed-type gypsum-DCPD cements are also described. In vivo rates of osteotransduction vary as follows: gypsum-DCPD > DCPD > CDHA approximately CA > HA. The osteotransduction of CDHA-type cements may be increased by adding ***dicalcium*** ***phosphate*** anhydrous (DCP) and/or CaCO₃ to the cement powder. CPBCs can be used for healing of bone defects, bone augmentation and bone reconstruction. Incorporation of drugs like antibiotics and ***bone*** ***morphogenetic***

protein is envisaged. Load-bearing applications are allowed for CHDA-type, CA-type and HA-type CPBCs as they have a higher compressive strength than human trabecular bone (10 MPa).

CT Check Tags: Human

Biomechanics

*Bone Cements: CH, chemistry

*Calcium Phosphates: CH, chemistry

Drug Carriers

Gels

Materials Testing

*Osseointegration: PH, physiology

Rheology

Solutions

RN 10103-46-5 (calcium phosphate)

CN 0 (Bone Cements); 0 (Calcium Phosphates); 0 (Drug Carriers); 0 (Gels); 0 (Solutions)

L4 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2002 ACS

AN 1997:362496 CAPLUS

DN 127:55818

TI The healing of segmental bone defects induced by bioresorbable calcium phosphate cement combined with rhBMP-2

AU Ohura, K.; Hamanishi, C.; Tanaka, S.; Matsuda, N.

CS Dep. Orthopaedic Surgery, Kinnki Univ. Sch. Med., Osaka, 540, Japan

SO Bioceram., Proc. Int. Symp. Ceram. Med. (1996), 9, 247-250

CODEN: BPCMFx

PE Elsevier

DT Journal

LA English

CC 63-7 (Pharmaceuticals)

AB Two doses of recombinant human ***bone*** ***morphogenetic***

protein (rhBMP-2) (1.26 or 6.28 .mu.g) were soaked into prehardened cylinders (.vphi. 4 .times. 5 mm) of bioresorbable calcium phosphate cement, consisting of .beta.-tricalcium phosphate-

monocalcium ***phosphate*** monohydrate-calcium sulfate hemihydrate. These cylinder were implanted into 5 mm segmental defects in the femora of adult male rats, and the results were compared with those in rats that had implantation of the cement alone. Both doses of rhBMP-2 induced bone formation in a dose-related manner. Implantation of 6.28 .mu.g of rhBMP-2 yielded much bone formation around cylinders at 3 wk, resulting in radiog. evidence of union in all cases, and showed the same torsional failure loads as those of the contralateral control at 9 wk. Despite new bone formation in the defects that had received 1.26 .mu.g of rhBMP-2 and no rhBMP-2, 40 . and no instances of union were obsd., resp.

ST bone defect cement morphogenetic protein; calcium phosphate bone cement

morphogenetic protein

IT Bone cements
Bone defects
(healing of segmental bone defects induced by bioresorbable calcium phosphate cement combined with rhBMP-2)

IT Bone morphogenetic proteins
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(healing of segmental bone defects induced by bioresorbable calcium phosphate cement combined with rhBMP-2)

IT 7758-23-8, Monocalcium phosphate 7758-87-4, Tricalcium phosphate 7778-18-9, Calcium sulfate
RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(healing of segmental bone defects induced by bioresorbable calcium phosphate cement combined with rhBMP-2)

L4 ANSWER 4 OF 4 JICST-EPlus COPYRIGHT 2002 JST
AN 940382732 JICST-EPlus
TI The effects of calcium phosphates on BMP activity.
AU JINDE TOSHIKAGE
CS Aichigakuin Univ., Faculty of Dentistry
SO Nippon Koku Geka Gakkai Zasshi (Japanese Journal of Oral and Maxillofacial Surgery), (1994) vol. 40, no. 3, pp. 377-395. Journal Code: G0132C (Fig. 34, Ref. 65)
ISSN: 0021-5163
CY Japan
DT Journal; Article
LA Japanese
STA New
AB In this experiment, five different soluble calcium phosphates ceramics were synthesized: HAP, .BETA.-TCP, .ALPHA.-TCP, OCP(octacalcium phosphate) and DCPD(***dicalcium*** ***phosphate*** dehydrate). The effects of the ceramics on ***BMP*** activity were investigated in vitro and in vitro. Five mg of ***BMP*** was prepared along with 5 or 25mg of ceramics. These were then combined to form complexes. These complexes were implanted epifascially in the femoral region, and their osteoinductive activities were examined at 4 weeks after implantation by means of roentgenographic and histologic observations. The amount of bone induced by the complexes was determined by a computer-supported image analysis system. For in vitro studies, a culture system which differentiated neonatal muscle into cartilage in response to ***BMP*** contained in Bone Matrix Gelatin (BMG(+)) was adopted. Calcium phosphate was applied onto the BMG, and a fetal rat muscle was placed on top, and the system was cultured. On Day 14 of culture, incorporation of .cets.35S!-sulfate into glycosaminoglycans(GAG) was measured. Furthermore, to study the solubility of the ceramics in the culture medium, the ceramics were soaked in the same medium for 3 days, and the amounts of Ca and P and the change in pH were measured. HAP, .BETA.-TCP and .ALPHA.-TCP did not affect ***BMP*** activity when 5mg and 25mg ceramics/ ***BMP*** complexes were implanted in the mice. OCP and DCPD did not affect ***BMP*** activity When 5mg ceramics/ ***BMP*** complexes were implanted, but inhibited ***BMP*** activity when 25mg ceramics/ ***BMP*** complexes were implanted. Only DCPD inhibited ***BMP*** activity while other ceramics did not in vitro. HAP, .BETA.-TCP and .ALPHA. TCP produced no change in the Ca and P concentrations of the medium, but DCPD increased the concentrations of Ca and P and OCP decreased the concentrations of Ca and P. All the ceramics

behaved similarly to the control in regard to the pH of the medium.
(abridged author abst.)

CC GT06000B (616.314-7)

CT osteogenesis; bioactive factor; calcium phosphate; in vivo experiment; in vitro experiment; mouse(animal); electron microscopy; animal test

BT bone metabolism; metabolism; factor; calcium compound; alkaline earth metal compound; phosphate(salt); phosphorus oxoate; oxoate; oxygen compound; oxygen group element compound; phosphorus compound; nitrogen group element compound; experiment; Myomorpha; Rodentia; Mammalia; Vertebrata; animal; microscopy; observation and view

=>

---Logging off of STN---

=>

Executing the logoff script...

=> LOG Y

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	44.01	48.99
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-1.24	-1.24

STN INTERNATIONAL LOGOFF AT 11:00:49 ON 24 MAY 2002